STATE AID AND SCHOOL CONSOLIDATION IN ILLINOIS

BY

LEON HIRAM WEAVER
B.S., University of Illinois, 1936
M.A., University of Illinois, 1938

AN ABSTRACT OF A
THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN
POLITICAL SCIENCE IN THE GRADUATE
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Purpose of the Study

The purpose of the study has been to investigate Illinois state aid policies to determine what effect they are having on school consolidation; and to attempt to determine means by which, and to judge the extent to which, state aid policies can be formulated to encourage school consolidation.

Sources of Information

The description of the present Illinois state aid law and its historical development was derived chiefly from an analysis of the Illinois session laws, revised statutes, and court decisions for the period studied. Also useful in this connection were monographs by students of school administration in this State.[1] The investigation of the relation of selected phases of the present Illinois state aid policies to school consolidation was based on data taken from the official reports and records of the State Superintendent of Public Instruction;[2] also upon data made available by the Illinois Agricultural Association in memorandum form relating to transportation aid and to the effects of with-holding aid from schools with less than seven pupils.[3] The determinations made for the proposed program of building aids were based chiefly on a study of the literature on school building administration and school building costs;[4] cost data regard-

[1]For example, O. F. Weber, *The Problem of School Organization and Finance in Illinois* (University of Illinois Bulletin, Vol. XXXVI, No. 15, 1938); and I. M. Labovitz, "Education," in S. E. Leland, Editor, *State-Local Fiscal Relations in Illinois* (University of Chicago Press, 1941). Acknowledgement is also made of the use of numerous memoranda and mimeographed releases prepared by and generously made available by Mr. Lester Grimm, Director of Research, Illinois Education Association, Springfield. Illinois.

[2]Chiefly the *Statistical Report of the Superintendent of Public Instruction* for various years; the *Annual Reports* of the county superintendents; state aid claims; and transportation aid claims.

[3]These memoranda were prepared by and generously made available by Mr. Allen D. Manvel, Director of Research, Illinois Agricultural Association, Chicago, Illinois.

[4]For example, N. L. Englehardt and Fred Englehardt, *Planning School Building Programs* (Bureau of Publications, Teachers' College, Columbia University, 1930); N. L. Englehardt, Jr., *School Building Costs* (Haddon Craftsman, Inc., Camden, N. J., 1939); *Functional Planning of Elementary School Buildings* (U. S. Office of Education Bulletin, No. 19, 1936); and *The Planning and Construction of School Buildings* (Thirty-third Yearbook of the National Society for the Study of Education, Public School Publishing Co., Bloomington, Illinois, Part I, 1934).

ing Illinois school building projects to which the Federal government contributed;[5] and financial data relating to school districts in the official publications of the State Superintendent of Public Instruction and in publications of the Illinois Tax Commission. The economic analyses involved in the application of various state aid plans to test areas and in the investigation of disparity in urban and rural assessment ratios were based on official reports and records of the State Superintendent of Public Instruction and on financial data relating to school districts published by the Illinois Tax Commission.[6] The investigation of the use of state aid to influence school consolidation in Missouri, New York, and Ohio was based chiefly on statutes, session laws, official reports, and correspondence with school officials.

Delimitation of the Problem

In the light of the successful attacks on proposed legislation which would have given a state agency power to reorganize local school units, it was assumed that, as far as the foreseeable future is concerned, reorganization by *fiat* of a state agency is not within the bounds of the politically feasible. If this be true, school reorganization in Illinois must be brought about by noncoercive methods, such as leadership designed to convince localities that consolidation is desirable; adult education and propaganda regarding the advantages of consolidation; and the encouragement of the formation of larger school units by the establishing of economic inducements as a result of granting them more liberal aid than the less adequate units, or as a result of withdrawing aid from the less adequate units. The study is devoted to the problem of providing economic inducements, and is thus largely restricted to the economic factors which motivate people to form larger school units or to keep the traditional

[5]*Allotments for Educational Building Construction* (Federal Works Agency, Public Works Administration, Washington, D. C., 1939).

[6]Chiefly *Property Tax Assessments, Levies, Rates, and Extensions* for the years 1939 and 1940 and the volumes published by the Survey of Local Finance in Illinois sponsored jointly by the Commission and the Works Progress Administration. The volumes in this series most useful in making this study were: *Atlas of Taxing Units* (Volume I), *Property Taxation: Assessed Valuations, Levies, Tax Rates, and Tax Extensions 1937 and 1938* (Volume III); *Bonded Indebtedness of Local Governments, 1927-1940* (Volume V); and *Tax-Rate Limits and Assessment Ratios, 1925-1940* (Volume VIII).

organization. These economic factors are but a part of the complex of factors which so motivate people. There is disagreement as to how large a part of the total situation the economic factors are.[7] It is assumed in the present study that the economic is *one* of the important factors influencing the attitudes of people toward consolidation. It can be argued that merely providing an economic incentive for consolidation, in the form of lower local taxes made possible by state aid, will be relatively ineffective until education and propaganda have convinced the general public, and especially rural people, that larger school units are desirable for their own sake. In answer to this, however, it is argued that, if economic incentives are established, the problem of education and propaganda will be simplified, since there will be added argument for consolidation; and that local action for consolidation is more likely to come about if there is education plus an economic incentive than if exclusive reliance is placed on hortatory efforts of officials and civic organizations.

Since the study is primarily an economic analysis, only incidental consideration is given to aspects of the question of encouraging school consolidation by means other than the use of state aid. The same is true with respect to aspects of state aid policy not directly related to the question of school consolidation. The problem of school consolidation in Illinois is chiefly a down-state problem. Therefore, the study should be interpreted primarily as a study in down-state school administration. The study is also devoted primarily to the problem of reorganization of the elementary school system—especially that part represented by the rural one- and two-room schools. The problem of reorganizing the high school system is treated only incidentally.

Definitions and General Principles

A grant-in-aid is considered to be any sum of money assigned by the State to a school district, regardless of whether the grant is outright or conditional, and regardless of whether it is paid

[7]See Charles A. Lee, "Suggested School District Reorganization Program for the State of Missouri," 26 *School and Community* (January, 1940), p. 37; H. L. Euler, *County Unification in Kansas* (Bureau of Publications, Teachers' College, Columbia University, 1935), pp. 42, 82, 85; and A. J. Burke, "State Aid for Reorganization," 19 *The Nation's Schools* (April, 1937), p. 36.

from the general or special funds of the State.[8] This definition is broader than the definitions used by some writers, and would include some payments which they might designate as shared taxes, such as the distribution of the proceeds of the Illinois two-mill property tax from 1855 to 1873.[9] By "consolidation" or "reorganization" is meant the formation of fewer and larger school units. The meaning of "school unit" can perhaps be best brought out by distinguishing between the two kinds of school units—attendance areas and units of financial support and political control. The significance of this distinction is that there can be consolidation of attendance areas without consolidation of political units, and vice versa. One political unit may contain two or more attendance areas, and one attendance area may draw students from several political units, as is the case when several districts transport their pupils to a school in a centrally located district.

Grants-in-aid in general may be thought of as having three purposes: equalization; serving as an instrument of central administrative control; and serving as a reward for local effort in order to stimulate action in a given direction. State aid policies intended to induce consolidation might be conceived of as coming within either of the latter two categories. If grants were made conditional upon a district having a certain area and enrollment, they could be thought of as primarily instruments of central control. In Illinois, grants to schools have been used primarily to assist school districts rather than to control them, although in later years there are evidences of the control aspect. Examples of this trend are the requirement that equalization districts must maintain recognized schools and legislation denying aid to schools with less than seven pupils. If grants were extended more generously to large districts than to small districts, they could be conceived of as grants intended to stimulate action in a given direction by rewarding local action. Stimulation grants have the disadvantage of being to some extent incom-

[8]L. D. White, *Introduction to the Study of Public Administration* (Macmillan Co., New York, 1939), p. 155. R. J. Hinckley, *State Grants-in-Aid* (New York State Tax Commission, Special Report No. 9, 1935), p. 12.

[9]E. g., Henry J. Bittermann. *State and Federal Grants-in-Aid* (Mentzer, Bush, and Co., Chicago, 1938), pp. 39-40. Lane W. Lancaster, *Government in Rural America* (D. Van Nostrand, New York, 1937), pp. 136-137, 169.

patible with the equalization philosophy, since they may result in state aid going to areas in reward for certain action which would have been taken anyway partially because the given area is a relatively able one. Grants based on the reward-for-effort philosophy between 1923 and 1928 resulted in relatively large sums of money going to the more able areas of the state simply because these areas were the only ones maintaining standards high enough to earn the various stimulation grants.

State grants-in-aid for schools distributed according to the equalization philosophy call for the state to contribute the difference between a measure of local taxpaying ability and a measure of educational need. The measure of taxpaying ability is usually a specified tax rate. Measures of educational need are of two types: pupil bases (school census, enrollment, average daily attendance) and the teacher basis. The chief objection to the use of pupil bases is that they do not relate directly to the cost of the program, since the ratio of necessary teachers to pupils may vary. Sparsely populated areas may need more teachers proportionately than do densely populated areas. Since teachers' salaries are the major part of the cost of education, sparsely populated areas are discriminated against by any form of the pupil basis. Use of the teacher basis meets this objection. This measure is open to the objection that two districts may be similarly situated, yet one may employ two or three times as many teachers as the other; and also to the objection that its use rests upon the assumption that a relatively large number of teachers in sparsely populated areas is necessary—that the existing number of small schools is justified. Strict adherence to the pupil basis will intrench the small rural districts less than will the teacher basis. The present $1,048 per teacher minimum for the calculation of equalization aid and the "eighteen pupil pegging" provision[10] for calculating general apportionments in effect until 1939 are forms of the teacher basis.

The Present State Aid System and Its Evolution

The money in the school fund available for general distribu-

[10]The provision that schools with less than eighteen ADA pupils were to be credited with that many for purposes of calculating the general apportionments.

tion to local districts[11] is assigned to the counties for the benefit of the school districts. In case the money available for this purpose is greater or less than the amount required, the apportionment to each county is proportionately increased or reduced. Elementary school districts receive a general apportionment of $11 for each resident pupil in average daily attendance. In addition to the general apportionment, equalization quotas are granted to elementary districts with an educational tax rate of at least one per cent of its equalized assessed valuation in sums sufficient to supplement the required tax levy and the general apportionment by an amount which will produce the larger sum under the following computations: (1) the sum of $56 per elementary ADA[12] pupil; (2) the sum of $1,048 per school building not in excess of two which it may be necessary to operate; or (3) in districts with a three-year average ADA of at least 25 resident pupils, $1,048 per teacher not in excess of two. However, after July 1, 1943, a school which has less than 7 ADA pupils for two consecutive years will not be eligible to receive state aid unless it is determined that geographic conditions require its operation or that it will have a resident enrollment of eight or a total enrollment of ten in the succeeding year. Elementary districts which in any year educate their children in other districts and which levy a one per cent tax, if the tax and general grant are not sufficient to pay the tuition and transportation costs, are entitled to an equalization grant to supplement the local tax and general grant sufficiently to pay the tuition and transportation costs, up to $100 per pupil. Separate high school districts (including non-high school districts) have equalization goals of $80 per high school ADA pupil and qualifying rates of three-fourths of one per cent of assessed valuation. In the case of "unit" (twelve-grade) districts, the equalization levels are $56 per elementary and $80 per high school ADA pupil, with the qualifying rate being one and one-half per cent of assessed valuation. Provision is made, by requiring the submission of budgets by equalization districts, for assuring that equalization

[11]After certain payments are made, such as for the teachers' retirement system, compensation of county superintendents, and payments to districts educating certain classes of children, such as orphans. *Ill. Rev. Stat.*, 1941, c. 122, sec. 234¾ (a)-(d).

[12]Average daily attendance.

quotas shall be used for educational purposes and not be used to increase cash balances. The current expenditures of equalization districts governed by boards of directors must be approved in advance by the county superintendent of schools. Any elementary district which fails to maintain a recognized school, or to provide educational facilities for its pupils in a recognized school, shall not be granted its equalization quota for that year.[13]

Within the last three decades state aid to schools in Illinois has increased from $1,000,000 to over $16,000,000 per year. Despite this increase, over nine-tenths of the cost of elementary and secondary education is borne locally. The allocation formulae in the state aid laws first emphasized the number of educables, then reward for effort, and finally (since 1927-28) there has been increased attention given to equalization. Despite the recent emphasis on equalization, in 1939 more than two-thirds of the state aid distributed to elementary and secondary schools was distributed on the basis of flat grants per elementary attendance pupil, and before that the proportion was even higher. Proposals in recent years for allocation formulae based on population, assessed valuation, or expenditure have either been defeated in the legislature or have been embodied in legislation which has been invalidated. Within the past decade there has been increasing attention devoted to the problem of distributing state aid in ways which would minimize any possible tendency of state aid to perpetuate the existing system or in ways which would positively encourage school consolidation. Examples of this trend are: the reiterated attitude of the Horner administration that reorganization should precede increases in state aid in order not to perpetuate the small district system; the passage of a transportation aid statute; repeal of the "eighteen pegging" clause regarding the general apportionments; passage of a statute denying aid to schools of less than seven pupils where transportation is feasible; and a proposal by the Department of Finance that formation of new large twelve-grade districts be encouraged by granting aid to them on liberal terms.

[13]*Ill. Rev. Stat.*, c. 122, sec. 234¾ (e).

Three phases of the present Illinois state aid system were analyzed in order to evaluate their effect on school consolidation: transportation aid; the distribution of the general apportionments and equalization quotas; and the denying of aid to schools with less than seven pupils. Evaluation of these features of the law must be, in some cases, tentative since the data available at the date of writing were only estimates and in other instances were for a period of time before the full effect of the legislation would be felt.

With these qualifications in mind, it is concluded that transportation aid during the first year of its operation had only a very limited effect as far as closing rural schools and thus enlarging attendance areas was concerned, since only approximately three per cent of the pupils for which transportation aid was claimed were in no-teacher districts. Approximately 95 per cent of the pupils for whom transportation aid was claimed were high school pupils or were in elementary systems with three or more teachers. An impetus to the transportation of rural elementary pupils is expected to be given by the 1941 legislation permitting districts to contract with other districts for the transportation of their pupils. As yet transportation aid has probably had a negligible effect upon the consolidation of political units, but it constitutes a potential encouragement to such consolidation in that it will lead rural people to think in terms of a larger school community and will tend to meet possible arguments against consolidation, such as the tax burden necessitated by transportation costs and, perhaps, the disparity between rural and urban assessment ratios. In one way transportation aid may operate to make consolidation of political units, as distinguished from attendance areas, more difficult, to the extent that closing rural schools permits such districts to become low tax areas which may be expected to have a vested interest in the existing system. The more of these districts there are, the more difficult and costly to the State will be the problem of providing local tax rate differentials favorable to consolidation.[14]

The elimination of the "eighteen pupil pegging" provision for the calculation of the general apportionments has resulted in a

[14]As used here, "tax rate differentials favorable to consolidation" means lower tax rates after consolidation than exist without consolidation.

larger proportion of the state aid being distributed as equalization quotas and less as general apportionments. It has been argued that removal of this clause from the statute would tend to minimize the tendency of state aid to intrench the small enrollment district. It is doubtful, however, if removal of this clause has changed local sentiment regarding consolidation greatly, since usually only a small local tax increase will be necessary to replace the revenue lost as a result of its repeal. The $1,048 minimum for equalization aid has, in effect, retained the "eighteen pupil pegging" provision for such districts as find the $1,048 goal more advantageous than the $56 per pupil goal. The significance of the $1,048 minimum changes as the per-pupil equalization goal is increased, since smaller schools find it advantageous to use the number of pupils. It may thus be argued that increasing the per-pupil goal does not give more aid to the small attendance schools which find the $1,048 minimum more advantageous, but helps the needier elementary schools where the number of pupils per teacher is reasonable. As far as the effect of the $1,048 minimum is concerned, this is true, but it is also true that, as the per-pupil goal is raised, smaller schools are subsidized more generously by the State than when they were using the $1,048 minimum. Study of the various areas of the State with respect to the extent to which their school budgets are subsidized by the State reveals that withdrawing the present state aid as a sanction for reorganization proposals would be of limited effect in large areas of the State, since such a loss could be replaced by a relatively small increase in local tax rates. Such areas contain a relatively large proportion of the rural pupils. In areas where withholding aid would be more effective it would not be as easy to justify as in the more able areas, since there is some tendency for counties relying heavily on state aid also to be counties where road conditions are less favorable to consolidation than in other areas of the State.

The chief effect of withholding aid from rural schools with less than seven attendance pupils will probably be a saving to the State (as far as such schools are concerned) and the freeing of funds for distribution as equalization aid to other districts. This is because many such schools are expected to continue to operate, because the loss in state aid can in many cases be compensated for by a small increase in the local tax rate, since it appears

that such districts, as a whole, tend to be relatively able districts. To the extent that such districts close their schools and reduce taxes, there is a danger that such areas will become low tax areas which will tend to oppose consolidation of taxing units. The experience of other states indicates that this can be one effect of closing rural schools without also merging political units, although the experience of New York indicates that this danger will be minimized if the low tax areas are scattered, are not too numerous, and if liberal aid is given to large units.

A Proposed Building Aids Program

There is a possibility, in some areas at least, that consolidation of attendance areas would necessitate new buildings to an extent that the cost of such new construction might offset economies resulting from consolidation. In order that this possibility might not discourage local communities from consolidating attendance areas, the State might assist in the program of new construction made necessary by consolidation. Such aid would be conditional on taxing units being of reasonable size. The proposed grant would follow the equalization pattern, in which the State would provide the difference between a uniform local contribution and a guaranteed unit cost.

The determination of the cost to be guaranteed was made after a study of cost data of Illinois school buildings constructed between 1933 and 1939 and which were financed partially by Federal grants. Adjustments were made for trends in construction costs. Per-classroom and per-pupil costs were then calculated and medians determined. A reasonable unit cost for the State to guarantee will depend on conditions which exist at a particular time and on the assumptions adopted with respect to certain issues. It is suggested that $10,000 per classroom unit or $350 per enrollment pupil would be a reasonable figure for the State to guarantee, assuming 1939-40 cost conditions, a pupil-teacher ratio of 30 to one, cost conditions at the average for the State, and that such guaranteed cost is not intended to provide facilities for gymnasiums or other special units. If a minimum cost sufficient to provide gymnasiums or other special units were to be guaranteed, a cost of $15,000 per classroom unit would appear to be reasonable, under 1939-40 cost conditions.

Estimates of a reasonable local contribution for building aid were made by studying the variations in unused local bonding capacity caused by variations in assessment ratios and variations in the ratio between existing debt and assessed valuation. These determinations also are influenced to some extent by the assumptions adopted with respect to certain issues. In some cases, assumptions must be cast in tentative or alternative form because it is not clear what the Illinois Supreme Court's attitude would be with respect to certain issues raised by reorganization of school units which have contracted debt prior to the reorganization.

In determining a reasonable local qualifying contribution for building aid, it was assumed that such contribution should be stated in terms of full value, that most districts would have to issue bonds, that a qualifying local contribution should not be set so high that districts in a substantial part of the State would be unable to qualify, and that considerable variation in assessment ratios will persist in the foreseeable future. On the basis of these assumptions it was determined that the upper limit for the local contribution was two per cent of full value, since to require more than that would result in many areas being unable to qualify because of restricted bonding capacity. Restricted bonding capacity is caused by low assessment ratios and existing indebtedness. It would be desirable that a reasonable amount of existing debt be deducted from the amount which the locality would be required to contribute. There is a possibility, however, that this arrangement would be attacked in the courts as violating the constitutional provision prohibiting the State from becoming responsible for the debts of local governments.[15] If such a provision were invalidated, and if a new district were required to assume the indebtedness of existing districts with which it is coterminous, or substantially so, the qualifying local contribution would have to be less than two per cent of full value—perhaps one per cent or lower—in order that areas with low assessment ratios or high ratios of indebtedness to assessed valuation would not be excluded from qualifying for aid as a result of the required qualifying contribution being higher than the amount which they can borrow.

[15]Art. IV, sec. 20.

The cost of a building aid program which would centralize rural enrollments in schools with three or more teachers is estimated to cost $60,000,000, assuming a per pupil cost of $400.[16] Abandoning no schools with three or more teachers would result in some relatively inefficient attendance areas, but the estimates were based on such an assumption because of a desire not to assume attendance areas so large that it will be difficult to get rural public opinion to accept them within the not too distant future. Under 1939-40 conditions, $100,000,000 may be estimated to represent the maximum cost of centralizing elementary enrollments, since this would make possible re-housing, at $400 a pupil, elementary pupils in rural schools and in urban centers of less than 1,000, and it is unlikely that reorganization plans will need to be so drastic in order to provide relatively efficient units.

Application of Various State Aid Plans to Hypothetical Larger Districts

The State Department of Finance has proposed that formation of large twelve-grade districts meeting minimum enrollment and area requirements be encouraged by granting aid to them on more liberal terms than those on which it is granted to present districts. In this proposal it is suggested that the new large districts be guaranteed the same equalization goals as the present districts, but that the new districts be allowed to qualify for equalization aid by levying a tax rate equivalent to 0.4 per cent of *full* value (a rate lower than that which obtains typically when equalization aid is claimed under the present law). Where a large district would not qualify for equalization aid on this basis, the present general apportionments ($11 per resident elementary ADA) would be paid. The proposal contained no provision for building aid.[17]

Evaluation of this proposal was attempted by applying it to test areas consisting of hypothetical twelve-grade districts.[18] The tax rate which would result in the hypothetical large district under this plan was compared with the tax rate which would

[16]This cost estimate, and the one which follows in this paragraph, is for the entire cost to both the State and the locality.

[17]*State Aid to Schools in Illinois* (Department of Finance, Springfield, Illinois), especially pp. 60 ff.

[18]The hypothetical large twelve-grade districts were obtained by combining enrollment and financial data for the high school and elementary districts underlying an independent high school district.

result under the state aid law now in effect and with the rates which would result if various modifications of this original proposal were in effect. These modifications consisted in lower qualifying rates than those proposed by the Department of Finance (ranging from .35 to .2 per cent of full value) combined with building aid of the type described above with qualifying local contributions ranging from 2 to .5 per cent of full value. The tax rate which would result under the various types of state aids studied was computed for each of three expenditure levels assumed in the new district: the 1939-40 level, a level based on the assumption that elementary expenditures would be raised to $82 per enrollment pupil, and a level based on the assumption that less money would be expended in the new district than was expended in the component districts in 1939-40 (because of fewer teachers being necessary). Allowance was made for a reasonable cost of transporting pupils, construction and maintenance of new buildings, and debt service. The tax rates resulting under the various expenditure levels and combinations of state aids were then compared with the three-year average combined tax rate[19] in each of the component elementary districts. The electorate of a given elementary district was assumed to have an economic incentive to vote for consolidation if the new district's tax rate was lower, or no higher, than the elementary district's three-year average rate.

Three hypothetical large districts were studied (one centering in Milton, one in Pittsfield, and one in St. Joseph).[20] The areas were chosen because the first two represent areas relying heavily on special aid and the third represents an area in which little special aid is claimed. Because of the relatively large amount of investigational effort required in making one of these case studies, the number is not large enough to permit inferences as to what the findings would be if similar case study techniques were employed throughout the entire State. They do, however, serve to clarify certain issues and to suggest problems worthy of future study.

[19]The total elemetary district tax rate plus the total tax rate of the overlying high school district.

[20]The first two were in Pike County, and the third was in Champaign County.

The least expensive combinations of state aids[21] which would give a tax rate differential favorable to consolidation to a majority of both the rural and urban electorates in the hypothetical districts may be summarized in tabular form as follows. (The first figure refers to the qualifying rate for equalization aid for current expenditures, expressed as dollars per $100 of full value, except where $1.50 appears, which is expressed in terms of dollars per $100 of assessed value. The second figure refers to the qualifying local contribution for building aid, expressed as a percentage of full value.)

Expenditure level assumed	Milton district	Pittsfield district	St. Joseph district
Present level	$0.35, 1%	$0.40, no b. aid	$0.20, 1.5%
Economies in instruction costs	$0.35, no b aid	$1.50, no b. aid	$0.25, no b. aid, *or* $1.50, 1.75%
Increased expenditure ($82 per elem. pupil)	None of combinations studied effective[a]	$0.25, 2%	None of combinations studied effective[a]

[a]"Effective" means that a given combination would give a tax rate differential favorable to consolidation to a majority of the rural electorate and to a majority of the urban electorate.

From this summary it can be seen that areas will vary considerably with respect to the qualifying rates necessary in order to give tax rate differentials favorable to consolidation. For example, in areas where tax rates have been relatively low, as in the St. Joseph area, lower qualifying rates will be needed in order for the State to provide tax rate differentials favorable to consolidation than in areas where rates have been higher, as in the Milton district. The tabular summary also indicates that the

[21]The combination of equalization and building aid which would entail the least expenditure from the State treasury.

effect on the local tax rate of changing the expenditure level in the new large district may outweigh changes in the amount of state aid received.

The case studies reveal that the Department of Finance proposal would give more generous aid to the test areas than the present law. They also suggest, however, that similar studies throughout the State may show that the qualifying rate for equalization aid for current expenses should be lower than that originally proposed by the Department (.4 per cent of full value) and building aid made available in order to establish tax rate differentials favorable to consolidation throughout a substantial proportion of the State. They also suggest that the cost of new buildings made necessary by consolidation will not be great where a large part of the new district's enrollment is already educated in an urban center where there exists some unused building capacity. In the hypothetical Pittsfield district, the tax rate to amortize the cost of the new buildings would be only $0.18 per $100 of assessed valuation, assuming no building aid. Where a relatively small urban community would serve as an attendance center for the new large district, there would be a tendency, other things being equal, for such a tax rate to be higher, since the ratio of the enrollment to be housed to the resources of the district would be higher. In the hypothetical Milton district, the tax rate to amortize the cost of the new building would be $.47 per $100 of assessed valuation, assuming no building aid.

The case studies also reveal that, in typical situations where the urban district's tax rate is the highest tax rate in the area, the problems of securing favorable tax rate differentials for a majority of the people in the rural area makes a more expensive combination of state aids necessary than would be the case if a vote were taken in which the urban electorate could over-ride the rural electorate. "Under-cutting"[22] the tax rates of a majority of the rural people is more difficult and expensive than merely "under-cutting" the rates of a majority of the people of the entire district. The effectiveness of a given amount of state aid in inducing consolidation will therefore depend to some extent upon the manner in which the vote is taken.

[22]Providing a tax rate in the new district that will be less than the average rate before consolidation.

The Disparity Between Urban and Rural Assessment Ratios

One reason, but not the only one, for the fact that existing tax rates are typically lower in rural areas than in urban areas is that assessment ratios are generally higher in rural areas. Apportioning the tax levies of the new large districts between urban and rural areas more nearly in proportion to their respective full values than are the present assessed values would, in typical situations, simplify the problem of securing tax rate differentials favorable to consolidation, since it would cause more money to be raised in the urban area than if assessed values were used, and therefore would cause less money to be raised in the rural areas. Such a procedure would tend to meet the argument based on equity that inclusion of urban and rural property within the same school district forces the rural people to bear more than their fair share of the school tax burden; it can also be defended on the ground that it would simplify the problem of providing economic inducements to school consolidation.

The extent to which this procedure would lighten the rural tax burden will vary directly with the extent to which the rural and urban assessment ratios differ and with the proportion of the district's assessed valuation which is contained in the urban area. Such apportionment of tax levies between urban and rural areas might be carried out in either of two ways: by improving the original assessment or by equalization. While the former is the more desirable method of meeting this problem, the latter may be the best solution which can be obtained within the foreseeable future. If this be true, equalization by the Tax Commission would seem to be more feasible than equalization by county boards of review. This is because it would probably be difficult to force these bodies to do what they now have power to accomplish but which is not being done. While the administrative problems of determining separate urban and rural assessment ratios for school districts in general conforming to the present four-year high school areas would demand appraisal techniques not yet used in the State for the determination of assessment ratios, the problem would not seem to be insurmountable, in

the light of the experience of New York and Wisconsin tax commissions, especially if the number of such districts was not large during the first few years of the program.

State Aid and School Consolidation in Missouri, New York, and Ohio

Three states—Missouri, New York, and Ohio—were studied in order to determine the ways in which state aid policies have been used in these states to encourage school consolidation and in order to judge the extent to which school consolidation has been brought about by such policies. Missouri has had only limited success in bringing about consolidation of schools although some state aid legislation indicates this intention. The aids offered have not provided sufficient inducement for the formation of large units. The state must be prepared to pay a price for the establishment of such units and Missouri has not paid the price. The experience of this state is also instructive in that it indicates that a master plan for redistricting can be fruitless if it is not implemented by a program of leadership and propaganda or economic sanctions and inducements. The experience of New York and Ohio indicates that state aid can be a potent factor in promoting consolidation if the state is willing to assume a relatively large share of the cost of the large units and to deny aid to inadequate units. While the experience of Missouri indicates that a master plan of redistricting can be of little value if it is not accompanied by economic inducements or educational leadership, the experience of New York and Ohio suggests that an effective way of using state aid as an inducement or sanction for consolidation is to relate it to a master plan of redistricting in which educational leadership and "grass root" participation can be utilized to a maximum degree.

Suggestions for Further Research

There is a need for further research with respect to certain problems involved in school consolidation. One type of research which would probably be fruitful would be more case studies of the type reported in which various state aid plans are applied to hypothetical larger districts in order to see their effect on tax rates. Another would be the application to hypothetical dis-

tricts of the proposal that tax levies be apportioned between urban and rural areas in proportion to full values, especially if rural and urban assessment ratios could be determined for the district by sales and appraisal data rather than by estimates based on the county averages.[23]

Another type of research which would probably be of value would be a study of the socio-psychological factors involved in school consolidation. Techniques for the measurement of attitudes are now available. Studies of the attitudes of people in rural communities would probably do much to throw light on the motivations which must be taken into consideration when writing legislation or planning adult education programs designed to further school consolidation.[24] In such a study the problem of securing valid data would be a serious one, but perhaps it could be minimized by securing the cooperation of county superintendents, addressing meetings of school directors, and by use of questionnaires.

[23]Data from the state aid claims useful in making such case studies were compiled by NYA assistants working under the direction of the writer. These data were for the following counties: Calhoun, Champaign, La Salle, Massac, Pike, Pulaski, Richland, and Sangamon. Since much of this information has not been exploited, the cards containing it have been deposited with E. L. Coberly, Office of State Superintendent of Public Instruction, Springfield, Illinois, for use of students of the problems of state aid and school consolidation.

[24]For such a study see H. L. Euler, *County Unification in Kansas* (Bureau of Publications, Teachers' College, Columbia University, 1935).

VITA

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